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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	SIN-DOO LEE ET AL.	)	
		)	Group Art Unit: 2871
Serial No.:	10/820,294	)	
		)	
Filed:	April 8, 2004	)	Examiner:
		)	Schechter, Andrew M.
For:	LIQUID CRYSTAL DISPLAYS WITH	)	
	MULTI-DOMAINS EFFECT FORMED	)	
	BY SURFACE GRATINGS	)	

## AMENDMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This amendment along with a petition for a one-month extension is submitted in response to the Office Action dated April 12, 2005. Applicants respectfully request allowance based on the following remarks.

IN THE SPECIFICATION

With respect to the title of the invention, please replace "LIQUID CRYSTAL DISPLAYS WITH MULTI-DOMAINS EFFECT FORMED BY SURFACE GRATINGS" with -- LIQUID CRYSTAL DISPLAYS WITH MULTI-DOMAIN EFFECT FORMED BY SURFACE UNDULATIONS --.

### IN THE CLAIMS

1. (Currently Amended) A liquid crystal display comprising:  
an upper substrate having ~~the~~an inner surface on which an upper electrode and an upper grating film having surface undulation are laminated;  
a lower substrate having ~~the~~an inner surface on which a lower electrode and a lower grating film having surface undulation are laminated, the said inner surface of the lower substrate being located facing the inner surface of the upper substrate; and  
~~the~~a liquid crystal having dielectric anisotropy which is sealed in the space between the upper substrate and the lower substrate,

wherein each of pixels having a predetermined period includes a plurality of sub pixels having different alignment structures in one period.

2. (Original) The liquid crystal display according to Claim 1, wherein the upper grating film having surface undulation is laminated upon the upper electrode in the upper substrate.

3. (Cancelled)

4. (Original) The liquid crystal display according to Claim 1, wherein the lower grating film having surface undulation is laminated upon the lower electrode in the lower substrate.

5. (Cancelled)

6. (Original) The liquid crystal display according to Claim 1, wherein the angle formed between the direction of the surface undulation on the upper substrate and the direction of the surface undulation on the lower substrate is between 0° and 180°.

7. (Original) The liquid crystal display according to Claim 6, wherein the angle formed between the direction of the surface undulation on the upper substrate and the direction of the surface undulation on the lower substrate is approximately 90°.

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## CERTIFICATE OF TRANSMISSION BY FACSIMILE (37 CFR 1.8)

Docket No.

21C-0174

Applicant(s): Sim-Doo LEE, et al.

Application No.  
10/820,294Filing Date  
4-8-2004Examiner  
Schechter, Andrew M.Group Art Unit  
2871

Invention: LIQUID CRYSTAL DISPLAYS WITH MULTI-DOMAINS EFFECT FORMED BY SURFACE GRATINGS

I hereby certify that this Combined Amendment & Petition for Extension of Time (2 pages),  
Amendment (12 pages) and Authorization to debit and/or credit  
Deposit Acct. No. 06-1139 - One Month Ext. of Time Fee  
(Identify type of correspondence)

is being facsimile transmitted to the United States Patent and Trademark Office (Fax. No. 571-273-8300)

on August 11, 2005  
(Date)

Tammie Lanthier

(Typed or Printed Name of Person Signing Certificate)

  
(Signature)

Note: Each paper must have its own certificate of mailing.

AUG 11 2005

**COMBINED AMENDMENT & PETITION FOR EXTENSION OF  
TIME UNDER 37 CFR 1.136(a) (Large Entity)**Docket No.  
21C-0174In Re Application Of: **Sin-Doo LEE, et al.**

Application No. 10/820,294	Filing Date 4-8-2004	Examiner Schechter, Andrew M.	Customer No. 23413	Group Art Unit 2871	Confirmation No. 7463
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Invention: **LIQUID CRYSTAL DISPLAYS WITH MULTI-DOMAINS EFFECT FORMED BY SURFACE GRATINGS****COMMISSIONER FOR PATENTS:**

This is a combined amendment and petition under the provisions of 37 CFR 1.136(a) to extend the period for filing a response to the Office Action of 4-12-2005 in the above-identified application.  
Date

The requested extension is as follows (check time period desired):

☒ One month    ☐ Two months    ☐ Three months    ☐ Four months    ☐ Five months

from: July 12, 2005  
Dateuntil: August 11, 2005  
DateRECEIVED  
OIP/EI/AP  
AUG 12 2005

The fee for the amendment and extension of time has been calculated as shown below:

**CLAIMS AS AMENDED**

	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST # PREV. PAID FOR	NUMBER EXTRA CLAIMS PRESENT	RATE	ADDITIONAL FEE
TOTAL CLAIMS	22 -	22 =	0	x \$50.00	\$0.00
INDEP. CLAIMS	3 -	3 =	0	x \$200.00	\$0.00
FEE FOR AMENDMENT					\$0.00
FEE FOR EXTENSION OF TIME					\$120.00
TOTAL FEE FOR AMENDMENT AND EXTENSION OF TIME					\$120.00

08/12/2005 HLE333 00000010 061130 10820294

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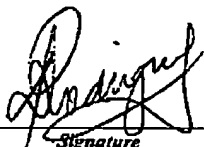
P281 ARRE/REV05

**COMBINED AMENDMENT & PETITION FOR EXTENSION OF  
TIME UNDER 37 CFR 1.136(a) (Large Entity)**Docket No.  
**21C-0174**

The fee for the amendment and extension of time is to be paid as follows:

- ☐ A check in the amount of \_\_\_\_\_ for the amendment and extension of time is enclosed.
- ☒ Please charge Deposit Account No. **06-1130** in the amount of **\$120.00**
- ☒ The Director is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. **06-1130**
- ☒ Any additional filing fees required under 37 C.F.R. 1.16.
- ☒ Any patent application processing fees under 37 CFR 1.17.
- ☒ If an additional extension of time is required, please consider this a petition therefor and charge any additional fees which may be required to Deposit Account No. **06-1130**
- ☐ Payment by credit card. Form PTO-2038 is attached.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

  
SignatureDated: August 11, 2005

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CC:

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on \_\_\_\_\_

(Date)

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Typed or Printed Name of Person Mailing Correspondence